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| 09/611,839 | 07/07/2000 | Michael L. Emens | AM9-1999-0218 | 6929 |

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EXAMINER

BURGESS, BARBARA N

| ART UNIT | PAPER NUMBER |
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2157

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/611,839

Applicant(s)

EMENS ET AL.

Examiner

Barbara N Burgess

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

This Office Action is in response to amendments filed November 14, 2003. Claims 1-21 are presented for further examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (hereinafter "Chang", 6,134,584) in view of Klug et al. (hereinafter "Klug", US 2004/0010546 A1).

As per claims 1, 11, 21, Chang discloses a method for scheduling a download from a server computer to a client computer, the method on the client computer comprising:

- Obtaining a first threshold time value (column 1, lines 50-56, column 3, lines 27-31, 47-55, 57-60, column 4, lines 1-16, 24-27, column 5, lines 59-65, column 6, lines 19-26, 40-55);
- Obtaining a second threshold time value (column 1, lines 50-56, column 3, lines 27-31, 47-55, 57-60, column 4, lines 1-16, 24-27, column 5, lines 59-65, column 6, lines 19-26, 40-55);
- Determining a time for performing a download between the first threshold time

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value and the second threshold time value (column 1, lines 50-56, column 3, lines 27-31, 47-55, 57-60, column 4, lines 1-16, 24-27, column 5, lines 59-65, column 6, lines 19-26, 40-55).

Chang does not explicitly disclose:

- Pinging at least one server to calculate locally at the client computer a response time between the client computer and the server;
- Obtain percentage of CPU utilization of the client;
- Calculating a weighted result of the response time and the CPU utilization;
- Determining locally at the client computer a time for performing a download between the first threshold time value and the second threshold time value based on the weighted result.

However, in an analogous art, Klug discloses a wait time before downloading can take place. This wait can be caused by a number of factors including speed of server, congestion, bandwidth, etc. (paragraphs [0011], [0051], [0053]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate pinging, obtaining CPU utilization, calculating a result, and determining a download time in Chang's method in order to gain some information regarding the approximate waiting time before files are actually downloaded.

As per claims 2, 12, Chang discloses a method according to claim 1, wherein the step of determining a time comprises a sub-step of:

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- Generating locally at the client computer a random time between the first threshold time value and the second

threshold time value (column 1, lines 50-56, column 3, lines 27-31, 47-55, 57-60, column 4, lines 1-16, 24-27, column 5, lines 59-65, column 6, lines 19-26, 40-55).

As per claims 3, 13, Chang discloses a method according to claim 2, wherein generating locally at the client computer a random time further comprises:

- Selecting a random number (column 1, lines 50-56, column 3, lines 27-31, 47-55, 57-60, column 4, lines 1-16, 24-27, column 5, lines 59-65, column 6, lines 19-26, 40-55);
- Selecting a random time between the first threshold time value and the second threshold time value, based on the random number, the first threshold time value and the second threshold time value (column 1, lines 50-56, column 3, lines 27-31, 47-55, 57-60, column 4, lines 1-16, 24-27, column 5, lines 59-65, column 6, lines 19-26, 40-55).

As per claims 4, 14, Chang further discloses a method according to claim 1, wherein said step of determining a time further comprises sub-steps of:

- Obtaining one or measures of local resource availability at the client computer including a count of the number of other downloads underway (column 1, lines 50-56, column 3, lines 27-31, 47-55, 57-60, column 4, lines 1-16, 24-27, column 5, lines 59-65, column 6, lines 19-26, 40-55);

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- Comparing the one or more measures to one or more corresponding preselected limits (column 1, lines 50-56, column 3, lines 27-31, 47-55, 57-60, column 4, lines 1-16, 24-27, column 5, lines 59-65, column 6, lines 19-26, 40-55).

As per claims 5, 15, Chang does not explicitly disclose a method according to claim 4, wherein the calculating a weighted result of the response time and the CPU utilization comprises:

- Calculating a weighted result of the response time and the CPU utilization and one or more measure of local resource availability.

However, in an analogous art, Klug discloses a wait time before downloading can take place. This wait can be caused by a number of factors including speed of server, congestion, bandwidth, etc. (paragraphs [0011], [0051], [0053]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate calculating a result in Chang's method in order to gain some information regarding the approximate waiting time before files are actually downloaded.

As per claims 6, 16, Chang does not explicitly disclose a method wherein the calculating of weighted result comprises:

- Calculating a weighted result using the equation of

$WS = PRT * PRTW + DC + CPU + CPUW$, wherein

PRTW is the response time weighted for pinging the server,

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DC is the count of number of downloads underway,

DCW is a weight for the count of number of downloads underway,

CPU is the percentage of CPU utilization,

CPUW is a weight for the percentage of CPU utilization,

WS is the weighted result.

However, in an analogous art, Klug discloses a wait time before downloading can take place. This wait can be caused by a number of factors including speed of server, congestion, bandwidth, etc. (paragraphs [0011], [0051], [0053]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate pinging, obtaining CPU utilization, calculating a result, and determining a download time in Chang's method in order to gain some information regarding the approximate waiting time before files are actually downloaded.

As per claims 7, 17, Chang does not explicitly disclose a method according to claim 6, wherein the response time weight of PRTW is on an order of magnitude of 100.

However, in an analogous art, Klug discloses a wait time before downloading can take place. This wait can be caused by a number of factors including speed of server, congestion, bandwidth, etc. (paragraphs [0011], [0051], [0053]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate pinging, obtaining CPU utilization, calculating a result, and determining a download time in Chang's method in

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order to gain some information regarding the approximate waiting time before files are actually downloaded.

As per claims 8, 18, Chang does not explicitly disclose a method according to claim 6, wherein the weight of CPU utilization CPUW is on an order of magnitude of 1/10.

However, in an analogous art, Klug discloses a wait time before downloading can take place. This wait can be caused by a number of factors including speed of server, congestion, bandwidth, etc. (paragraphs [0011], [0051], [0053]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate pinging, obtaining CPU utilization, calculating a result, and determining a download time in Chang's method in order to gain some information regarding the approximate waiting time before files are actually downloaded.

As per claims 9, 19, Chang does not explicitly disclose a method for scheduling a download from a server computer to a client computer, the method on the client computer comprising:

- Checking a percentage of CPU utilization of a client computer;
- Checking a ping response time between the client computer and a server computer.

However, in an analogous art, Klug discloses a wait time before downloading can take place. This wait can be caused by a number of factors including speed of server, congestion, bandwidth, etc. (paragraphs [0011], [0051], [0053]).

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Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate pinging, obtaining CPU utilization, calculating a result, and determining a download time in Chang's method in order to gain some information regarding the approximate waiting time before files are actually downloaded.

As per claims 10, 20, Chang does not explicitly disclose a method according to claim 9, further comprising a step of:

- Obtaining a weight corresponding to the percentage of CPU utilization;
- Obtaining a weight corresponding to the ping response time;
- Obtaining a weight corresponding to the count of the number of downloads currently underway;
- Calculating a weighted sum of the percentage of CPU utilization, the ping response time, and the count of the number of downloads currently underway, using the weight corresponding to the percentage of CPU utilization, the weight corresponding to the ping response time, and the weight corresponding to the count of the number of downloads currently underway;
- Comparing the weighted sum to a limit value.

However, in an analogous art, Klug discloses a wait time before downloading can take place. This wait can be caused by a number of factors including speed of server, congestion, bandwidth, etc. (paragraphs [0011], [0051], [0053]).

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Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate pinging, obtaining CPU utilization, calculating a result, and determining a download time in Chang's method in order to gain some information regarding the approximate waiting time before files are actually downloaded.

Response to Arguments

The Office notes the following arguments:

- (a) All of the processing and managing is performed by a client-side computer not a host or server-side computer as Phaal is directed.
- (b) Examiner is confounding "ping response time" between two computers coupled by a network with a scheduler application running on the server.

In response to:

- (a)-(b) Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N Burgess whose telephone number is (703) 305-3366. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Ettinene can be reached on (703) 308-7562. The fax phone numbers

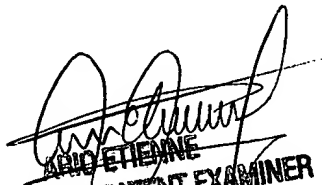
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for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Barbara N Burgess
Examiner
Art Unit 2157

January 24, 2004


ANDRÉ ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100